## CLAIMS

1. A compound of formula (I) or a pharmaceutically acceptable salt thereof:

$$R^{1}$$
 $R^{2}$ 
 $S(O)_{n}$ 
 $R^{3}$ 

**(I)** 

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in which:

n represents 1 or 2;

R<sup>1</sup> is one or more substituents independently selected from halogen, CN, nitro, SO<sub>2</sub>R<sup>4</sup>, OR<sup>4</sup>, SR<sup>4</sup>, SOR<sup>4</sup>, SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, CONR<sup>5</sup>R<sup>6</sup>, NR<sup>5</sup>R<sup>6</sup>, NR<sup>9</sup>SO<sub>2</sub>R<sup>4</sup>, NR<sup>9</sup>CO<sub>2</sub>R<sup>4</sup>, NR<sup>9</sup>COR<sup>4</sup>, aryl, heteroaryl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl or C<sub>1-6</sub>alkyl, the latter five groups being optionally substituted by one or more substituents independently selected from halogen, OR<sup>7</sup> and NR<sup>8</sup>R<sup>9</sup>, NR<sup>8</sup>R<sup>9</sup>, S(O)<sub>x</sub>R<sup>7</sup> where x is 0, 1 or 2;

R<sup>2</sup> is hydrogen, halogen, CN, SO<sub>2</sub>R<sup>4</sup> or CONR<sup>5</sup>R<sup>6</sup>, COR<sup>4</sup> or C<sub>1-7</sub>alkyl, the latter group being optionally substituted by one or more substituents independently selected from halogen atoms, OR<sup>8</sup> and NR<sup>5</sup>R<sup>6</sup>, S(O)<sub>x</sub>R<sup>7</sup> where x is 0,1 or 2;

R<sup>3</sup> is aryl or a 5-7 membered aromatic ring containing one or more heteroatoms selected from N, S and O, each of which is optionally substituted by one or more substituents independently selected from halogen, CN, nitro, SO<sub>2</sub>R<sup>4</sup>, OH, OR<sup>4</sup>, SR<sup>4</sup>, SOR<sup>4</sup>, SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, CONR<sup>5</sup>R<sup>6</sup>, NR<sup>5</sup>R<sup>6</sup>, NR<sup>9</sup>SO<sub>2</sub>R<sup>4</sup>, NR<sup>9</sup>CO<sub>2</sub>R<sup>4</sup>, NR<sup>9</sup>COR<sup>4</sup>, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>1</sub>-C<sub>6</sub> alkyl, the latter three groups being optionally substituted by one or more substituents independently selected from halogen atoms, OR<sup>7</sup> and NR<sup>8</sup>R<sup>9</sup>, S(O)<sub>x</sub>R<sup>7</sup> where x is 0,1 or 2;

R<sup>4</sup> represents aryl, heteroaryl, or C<sub>1</sub>-C<sub>6</sub> alkyl, all of which may be optionally substituted by one or more substituents independently selected from halogen atoms, aryl, heteroaryl, OR<sup>10</sup>

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and  $NR^{11}R^{12}S(O)_xR^{13}$  (where x = 0, 1 or 2),  $CONR^{14}R^{15}$ ,  $NR^{14}COR^{15}$ ,  $SO_2NR^{14}R^{15}$ ,  $NR^{14}SO_2R^{15}$ , CN, nitro;

R<sup>5</sup> and R<sup>6</sup> independently represent a hydrogen atom, a C<sub>1</sub>-C<sub>6</sub> alkyl group, an aryl, or a heteroaryl, the latter three of which may be optionally substituted by one or more substituents independently selected from halogen atoms, aryl, OR<sup>13</sup> and NR<sup>14</sup>R<sup>15</sup>, CONR<sup>14</sup>R<sup>15</sup>, NR<sup>14</sup>COR<sup>15</sup>, SO<sub>2</sub>NR<sup>14</sup>R<sup>15</sup>, NR<sup>14</sup>SO<sub>2</sub>R<sup>15</sup>, CN, nitro;

R<sup>5</sup> and R<sup>6</sup> together with the nitrogen atom to which they are attached can form a 3-8 membered saturated heterocylic ring optionally containing one or more atoms selected from O, S(O)<sub>x</sub> where x is 0, 1 or 2, NR<sup>16</sup>, and the ring itself optionally substituted by C<sub>1</sub>-C<sub>3</sub> alkyl;

R<sup>7</sup> and R<sup>13</sup> independently represent a C<sub>1</sub>-C<sub>6</sub> alkyl group, an aryl or heteroaryl group all of which may be optionally substituted by halogen atoms;

R<sup>8</sup> represents a hydrogen atom, C(O)R<sup>9</sup>, C<sub>1</sub>-C<sub>6</sub> alkyl (optionally substituted by halogen atoms, aryl or heteraryl groups, both of which may also be optionally substituted by one or more fluorine atoms); an aryl or a heteroaryl group, which may be optionally substituted by one or more halogen atoms;

each of R<sup>9</sup>, R<sup>10</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>14</sup>, R<sup>15</sup>, independently represents a hydrogen atom, C<sub>1</sub>-C<sub>6</sub> alkyl, an aryl or a heteroaryl group (all of which may be optionally substituted by one or more halogen atoms); and

 $R^{16}$  is hydrogen,  $C_{1^{-4}}$  alkyl,  $-C(O)C_1-C_4$  alkyl,  $C(O)YC_1-C_4$ alkyl, Y is O or  $NR^7$ .

or a pharmaceutically acceptable salt or solvate thereof.

- 2. A compound according to claim 1 in which n is 2.
  - 3. A compound according to claim 1 or 2 in which R<sup>1</sup> is halogen, nitrile, C<sub>1-6</sub>alkyl or SO<sub>2</sub>R<sup>4</sup>, NO<sub>2</sub>, NR<sup>9</sup>COR<sup>4</sup>, NR<sup>9</sup>SO<sub>2</sub>R<sup>4</sup>, aryl, NR<sup>5</sup>R<sup>6</sup>.
- 4. A compound according to any one of claims 1 to 3 in which the substituent(s) is/are in the 4- and/or 5- position

- 5. A compound according to any one of claims 1 to 4 in which R<sup>2</sup> is C<sub>1-6</sub>alkyl.
- 6. A compound according to claim 4 in which R<sup>3</sup> is phenyl substituted by halogen..

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7. A compound according to claim 1 selected from:
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3-[(4-chlorophenyl)sulfonyl]-2,5-dimethyl-1H-indol-1-acetic acid;
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- 5-chloro-3-[(4-chlorophenyl)sulfonyl]-2-methyl-1H-indole-1-acetic acid;
- 6-chloro-3-[(4-chlorophenyl)sulfonyl]-2-methyl-1H-indole-1-acetic acid;
- 7-chloro-3-[(4-chlorophenyl)sulfonyl]-2-methyl-1*H*-indole-1-acetic acid;
  - 5-chloro-3-[(4-chlorophenyl)sulfonyl]-4-cyano-2-methyl-1H-indole-1-acetic acid;
  - 5-chloro-3-[(4-chlorophenyl)sulfonyl]-6-cyano-2-methyl-1*H*-indole-1-acetic acid;
  - 3-[(4-chlorophenyl)sulfinyl]-2,5-dimethyl-1*H*-indole-1-acetic acid;
  - $3-[(4-chlorophenyl)sulfonyl]-4-(ethylsulfonyl)-7-methoxy-2-methyl-1 \\ H-indole-1-acetic$
- 15 acid;
  - 3-[(4-chlorophenyl)sulfinyl]-5-cyano-2-methyl-1H-indole-1-acetic acid;
  - 3-[(4-chlorophenyl)sulfonyl]-5-cyano-2-methyl-1*H*-indole-1-acetic acid;
  - 5-chloro-3-[(4-chlorophenyl)sulfonyl]-2-methyl-1H-indole-1-acetic acid,
  - 4-chloro-3-[(4-chlorophenyl)sulfonyl]-2-methyl-1H-indole-1-acetic acid;
- 20 3-[(4-methoxyphenyl)sulfonyl]-2,5-dimethyl-1*H*-indol-1-acetic acid;
  - 3-[(3-methoxyphenyl)sulfonyl]-2,5-dimethyl-1*H*-indol-1-acetic acid;
  - 3-[(2-Chlorophenyl)sulfonyl]-2,5-dimethyl-1*H*-indol-1-acetic acid;
  - 3-[(3-Chlorophenyl)sulfonyl]-2,5-dimethyl-1*H*-indol-1-acetic acid;
  - 3-[(4-Cyanophenyl)sulfonyl]-2,5-dimethyl-1*H*-indole-1-acetic acid;
- 25 3-[(2-methylphenyl)sulfonyl]-2,5-Dimethyl-1*H*-indol-1-acetic acid;
  - 3-[(2-ethylphenyl)sulfonyl]-2,5-dimethyl-1*H*-indol-1-acetic acid;
  - 3-[(4-chlorophenyl)sulfonyl]-2-methyl-4-nitro-1*H*-indole-1-acetic acid;
  - 4-(Acetylamino)-3-[(4-chlorophenyl)sulfonyl]-2-methyl-1H-indole-1-acetic acid;
  - $3-[(4-chlorophenyl)sulfonyl]-2-methyl-4-[(methylsulfonyl)amino]-\ 1 \\ H-indole-1-acetic$
- 30 acid;
  - 3-[(4-chlorophenyl)sulfonyl]-4-(ethylamino)-2-methyl-1*H*-indole-1-acetic acid;
  - 3-[(2,6-Dichlorophenyl)sulfonyl]-2,5-dimethyl-1*H*-indole-1-acetic acid;

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- 3-[(4-chlorophenyl)sulfonyl]-2-methyl-4-phenyl-1*H*-indole-1-acetic acid
- 3-[(4-chlorophenyl)sulfonyl]-5-fluoro-2-methyl-1H-indole-1-acetic acid,
- 3-[(3-chlorophenyl)sulfonyl]-5-fluoro-2-methyl- 1H-indole-1-acetic acid,
- 5-fluoro-2-methyl-3-[[4-(trifluoromethyl)phenyl]sulfonyl]- 1H-indole-1-acetic acid,
- and pharmaceutically acceptable salts thereof.
  - 8. A compound of formula (I) according to any one of claims 1 to 7 for use in therapy.
  - 9. A method of treating a disease mediated by prostaglandin D2, which comprises administering to a patient a therapeutically effective amount of a compound of formula (I), or a pharmaceutically acceptable salt as defined in claims 1 to 7.
    - 10. A method according to claim 9 where the disease is asthma or rhinitis...
- 11. Use of a compound of a compound of formula (I), or a pharmaceutically acceptable salt as defined in claims 1 to 7, in the manufacture of a medicament for treating a disease mediated by prostaglandin D2.
  - 12. Use of a compound of a compound of formula (I), or a pharmaceutically acceptable salt as defined in claims 1 to 7, in the treatment of a disease mediated by prostaglandin D2.
    - 13. Use according to claim 11 or 12 where the disease is asthma or rhinitis.
- 14. A process for the preparation of a compound of formula (I) which comprises reaction of a compound of formula (II):
  - (a) oxidation of a compound of formula (II):

$$O$$
 $OR^{17}$ 
 $OR^{17}$ 
 $R^2$ 
 $S-R^3$ 
(II)

in which  $R^{17}$  is hydrogen or alkyl and  $R^1$ ,  $R^2$  and  $R^3$  are as defined in formula (I) or are protected derivatives thereof, or

(c) reaction of a compound of formula (III):

$$R^1$$
 $R^2$ 
 $S(O)_n - R^3$ 
(III)

in which  $R^1$ ,  $R^2$  and  $R^3$  are as defined in formula (I) or are protected derivatives thereof, with a compound of formula (IV):

$$R^{18}$$
-O(CO)CH<sub>2</sub>-L (IV)

where R<sup>18</sup> is an alkyl group and L is a leaving group in the presence of a base, and optionally thereafter (a) or (b) in any order:

- hydrolysing the ester group R<sup>17</sup> or R<sup>18</sup> to the corresponding acid
- removing any protecting group
- forming a pharmaceutically acceptable salt.

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